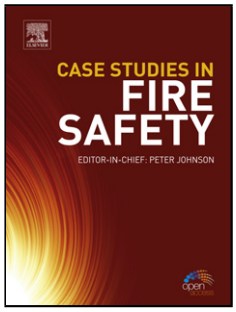

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Author: Glaydson L.F. Mendonça Stefane N. Costa Valder N. Freire Paulo N.S. Casciano Adriana N. Correia Pedro de Lima-Neto

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Understanding the corrosion inhibition of carbon steel and of copper in sulphuric acid medium by amino acids using electrochemical techniques allied to the molecular modelling methods

Glaydson L. F. Mendonça[1], Stefane N. Costa[1], Valder N. Freire[2], Paulo N. S. Casciano[1], Adriana N. Correia[1], Pedro de Lima-Neto[1*]

[1] *Departamento de Química Analítica e Físico-Química, Universidade Federal do Ceará, Campus do Pici 60440-900 Fortaleza-CE, Brazil.*

[2] *Departamento de Física, Universidade Federal do Ceará, Campus do Pici, Caixa Postal 6030, 60440-900 Fortaleza-CE, Brazil.*

**Corresponding author:* Pedro de Lima-Neto, email-plimaneto@ufc.br

Highlights

- Corrosion inhibition of carbon steel and of copper by the amino acids was studied.
- Inhibition efficiencies were experimentally achieved by electrochemical impedance.
- DFT and Monte Carlo methods allowed correlating molecular properties with inhibition efficiency
- The corrosion inhibition followed the electron donation the electron-back donations process